

Health & Safety Manual

Chapter 1

Introduction

(Enter Company Name) hereinafter referred to as "The Company" strives to provide the safest environment possible both for our employees and the people we serve. In order to uphold our goal of keeping our workplace safe and healthful for our staff we have implemented this safety policy.

Goals

All of our corporate goals are important but, above all else, maintaining our employees' well being is essential for The Company to exist. Eliminating accidents that may ultimately end in loss or restriction of work ability allows us to remain a productive corporation which, in turn, allows our employees to reap the benefits of our productivity. Occupational injuries and illnesses are caused by a failure to recognize and eliminate hazards, or adhere to established work practices and procedures.

Occupational injuries and illnesses can be avoided and eliminated. Our most important objective should be for employees to follow and adhere to The Company procedures and work practices which promote the total elimination of accidents.

Accident prevention is a product of sound management, proper training, and acceptance by everyone, from the top down, that all injuries can be prevented. This can be achieved in part by delegating responsibility and accountability to all involved in this The Company's operation.

Benefits of achieving our goals are:

- Reduce the risk of injury or illness for our employees, by identifying and eliminating hazards throughout the Company.
- Reduce the number of worker compensation claims.
- Decrease the probability of not fulfilling a contract due to being down staff.
- Improve employee's willingness to work hard, knowing that they are cared about.
- Minimizing the loss of property and equipment.
- Elimination of potential fatalities or permanent disabilities.

Responsibilities

Safety Director

1. Establishing The Company safety goals and objectives.
2. Developing and implementing a written Safety and Health program.
3. Ensuring total commitment to the Safety and Health program.
4. Maintain a safety focused work environment-distribute safety messages, publications, or articles.
5. Keep all incident/accident reports and safety documentation on file.
6. Investigate and track all serious and/ or incidents/accidents to make any appropriate modifications that would need to be made to reduce the risk of the same incident/accident occurring again.
7. Becoming thoroughly familiar with OSHA regulations and local and state safety codes.

Management

1. Enforces the use of personal protective equipment and safety devices.
2. Maintains a safe environment for all employees.
3. Passes along any safety message or article distributed by the safety director.
4. Report all incident/accidents to the safety director in a timely manner.
5. Provides human resources with any possible worker compensation claims with accurate information in a timely manner.
6. Hold safety related trains for all employees.
7. Spending time with each person hired explaining the safety policies and the hazards of his/her particular work.
8. Ensuring that the initial orientation of "new hires" is carried out.
9. Never short-cutting safety expediency, nor allowing workers to do so.

The Employee

1. Observe all The Company safety practices.
2. Use proper personal protective equipment when needed.
3. Observe all safety messages.
4. Know where SDS sheets are located.
5. Follow all driving safety policies.
6. Use proper lifting techniques.
7. Wear appropriate footwear to reduce the risk of trips or falls.
8. Report all work-related accidents to management promptly.
9. Knowing the location of first aid, fire fighting equipment, and other safety devices.
10. Attending any and all required safety and health meetings.
11. Not performing potentially hazardous tasks, or using any hazardous materials until properly trained, and following all safety procedures when performing those tasks.
12. STOPPING AND ASKING QUESTIONS IF EVER IN DOUBT ABOUT THE SAFETY OF ANY OPERATION.

Chapter 2

Safety and Health Orientation

Workplace safety and health orientation should begin on the first day of initial employment or job transfer. Each employee should have access to a copy of this safety manual, through his or her supervisor, for review and future reference.

All employees should be instructed by their supervisors that compliance with the safety rules described in the workplace safety manual is required.

Job-Specific Training

- Supervisors should initially train employees on how to perform assigned job tasks safely.
- Supervisors should carefully review with each employee the specific safety rules, policies, and procedures that are applicable and that are described in the workplace safety manual.
- Supervisors should give employees verbal instructions and specific directions on how to do the work safely.
- Supervisors should observe employees performing the work. If necessary, the supervisor should provide a demonstration using safe work practices, or remedial instruction to correct training deficiencies before an employee is permitted to do the work without supervision.
- All employees should receive safe operating instructions on seldom-used or new equipment before using the equipment.
- Supervisors should review safe work practices with employees before permitting the performance of new, non-routine, or specialized procedures.

Periodic Retraining of Employees

All employees should be retrained periodically on safety rules, policies and procedures, and when changes are made to the workplace safety manual. Individual employees should be retrained after the occurrence of a work-related injury caused by an unsafe act or work practice, and when a supervisor observes employees displaying unsafe acts, practices, or behaviors.

All new employees should be presented with the following information through a formal training or reviewing this manual with their supervisor. The objectives of the trainings are to expand the awareness of the employee to the real dangers in the workplace and how to avoid them. In addition, not only to inform the employees, but also to instruct them to develop safe work practices. The following topics should be presented at a minimum. Depending on the employee's job description some topics are not applicable.

1. Hazard Communication
2. Location of eye wash stations
3. Personal Protective Equipment
 - When to use
 - What is necessary
 - Proper care

4. Safe Lifting
5. Slip, Trip, and Fall Prevention
6. Hand and Power Tools
7. Driver Safety
8. Blood Borne Pathogen
9. Heat Stress
10. Fire Extinguisher
11. Forklift Safety
12. Silica Prevention
13. Respiratory Protection
14. How and when to report work-related injuries or accidents.
15. General safe workplace practices.

Training and Safety Orientation

In addition to trainings and orientations it is the responsibility of the safety director to email safety reminders and to include safety tips in the monthly newsletter. It then is the responsibility of each manager to pass the information along through either meetings or posting the messages.

All appointed employees of The Company shall attend and participate in the monthly meetings. The monthly meeting shall include problems that have arisen or that are anticipated along with any other safety and health topics. Such topics that shall be reviewed include:

1. Reviewing accidents, injuries, property losses, and “near misses”.
2. Evaluating accidents, injuries, property losses, and “near misses” for trends and similar causes to initiate corrective actions.

Chapter 3

Accident Investigation Procedures

An accident investigation should be performed by the supervisor at the location where the accident occurred. The safety director is responsible for seeing that the accident investigation reports (see appendix A) are being filled out completely, and that the recommendations are being addressed. Supervisors should investigate all accidents, injuries, and occupational diseases using the following investigation procedures:

- Implement temporary control measures to prevent any further injuries to employees.
- Review the equipment, operations, and processes to gain an understanding of the accident situation.
- Identify and interview each witness and any other person who might provide clues to the accident's causes.
- Investigate causal conditions and unsafe acts; make conclusions based on existing facts.
- Complete the accident investigation report.
- Provide recommendations for corrective actions.
- Indicate the need for additional or remedial safety training.

Accident investigation reports should be submitted to the safety director within 24 hours of the accident.

If injured on the job we ask that you contact Company Nurse. Company Nurse is a telephonic triage injury hotline. When an injury occurs, the injured employee and/or supervisor places a call to Company Nurse, a 24/7/365 hotline staffed by trained telephonic triage nurses. Using proven interviewing techniques and proprietary medical triage algorithm software, the Registered Nurses can recommend first-aid advice or medical treatment to employer designated medical care sites

Return to Work Program

This organization is committed to helping employees with work-related injuries or illnesses transition to full recovery through temporary assignments aligned to their physical capabilities. We work with employees and their treating doctors to modify their existing jobs or find alternative assignments that can help them remain an active part of our company, even during recovery.

The prompt return of injured employees to positions within their medical restrictions will minimize the impact of work-related injuries. Coming back to work early helps employees remain functional as they recover while providing our organization with the valuable use of employees' talents.

If you are injured at work, report the injury to your supervisor immediately — no matter how minor the injury is. You and your supervisor will then call the Company Nurse Injury Hotline to report the injury and get a treatment recommendation. Any questions concerning workers' compensation should be directed to this the safety director or your supervisor. Your supervisor and/or safety director will help arrange for medical treatment following an injury. Prompt, quality medical treatment can be assured through the use of our telephonic triage injury hotline.

Current positions may be modified to fit the medical limitations of injured employees by modifying workstations, altering specific tasks or working reduced hours. If this is not possible, temporary transitional jobs may be made available either with your department or through a temporary assignment with another department. The injured employee must obtain a work status report from an approved physician and give it to their supervisor after each medical appointment.

Chapter 4

Recordkeeping Procedures

The corporate safety director should control and maintain all employee accident and injury records. Records are maintained for a minimum of five (5) years and include:

- Accident Investigation/Employee Injury Reports see appendix A;
- Log & Summary of Occupational Injuries and Illnesses 300 form.

Chapter 5

Chemical Hazards in the Workplace -Osha Standard 29 CFR Part 1910.1200

The Hazard Communication Standard sometimes called the "Right to Know" law states that employers must establish a program to inform employees of the hazards associated with the materials in their workplace. The purpose of the law is to provide a safer workplace. Any employee using or exposed to chemicals is required to participate in our "OSHA Chemical Handling" Training. Training consists of the following:

- Types of Chemicals
- Terminology
- Routes of Entry
- Labeling
- Safety Data Sheets (SDS)
- Protective Measures
- Personal Protective Equipment
- Chemical Storage
- Leaks and Spills
- First Aid and Emergency Procedures

In order to comply with OSHA's Hazard Communication Standard, a written Hazard Communication Program has been developed.

All departments are included in this program. This written Hazard Communication Program will be available in The Company's Lead Administrator's office and at each pool location for review by any interested employee.

Proper Chemical Handling

Protect yourself from the thousands of PREVENTABLE injuries that occur each year from handling pool chemicals. Hazardous substances are capable of being safely handled day-after day though proper training.

A number of the pool chemicals, especially those exhibiting oxidation properties, can potentially be highly reactive and capable of generating high temperatures, as well as releasing toxic vapors if improperly handled or stored. Reactivity may be triggered by water wetting the chemical, or by the inadvertent mixing of a pool chemicals with an

incompatible material. Some pool chemicals are self-reactive over time, even without moisture addition or mixing with other materials. The products of this decomposition may include chlorine gas which may cause the corrosion of piping and other metal equipment in poorly ventilated areas. These chemicals are packaged in “breathable” containers to avoid pressure buildup while in storage. A partial listing of pool chemicals includes sodium bicarbonate, sodium hypochlorite, calcium hypochlorite, and certain ammonium, brominated, and muriatic acid. Pool chemicals involved in fire or toxic vapor release are likely to include those that add chlorine or a chlorine ion to the pool water for bacterial control. Chemicals that release chlorine are among the group of chemicals that are classified as oxidizers. These pool oxidizer chemicals include calcium hypochlorite, and sodium hypochlorite. Other pool chemicals are used to control the growth of algae or fungus, to adjust the acidity or alkalinity (pH control), and to clarify pool water.

BEFORE YOU USE POOL CHEMICALS

- Have you taken our OSHA Chemical Handling Training?? If you are handling chemicals it is a must!!
- Ask for help if you are unsure of any specific task!!!!
- Read entire product label or Safety Data Sheet (SDS) before using.
- Dress for safety by wearing appropriate Personal Protective Equipment (Safety goggles, gloves, apron, respirator (if needed))
- Read chemical product label before each use
- Never guess the identity of unlabeled chemicals. If a chemical is unlabeled, **DO NOT USE IT.**

Using Pool Chemicals Safely

- Never Mix
 - Chlorine products with acid; this could create toxic gases
 - Different pool chemicals (for example, different types of chlorine products) with each other or with any other substance
 - **DO NOT** pre-dissolve solid pool chemicals or dilute liquid pool chemicals before use.
 - If product label directs pre-dissolving, add pool chemical to water; **NEVER** add water to pool chemical because violent (**POTENTIALLY EXPLOSIVE**) reaction can occur.
 - Dedicate equipment- such as scoops, buckets, and their lids to one pool chemical. **DO NOT** use this equipment for any other chemical. Label the equipment to indicate which chemical to use with.
 - Use only dry equipment such as scoops when handling chemicals.
 - Close containers properly after each use.
 - Wash hands after working with pool chemicals.

Chemical Storage Area Safety

As you learned earlier if pool chemicals are not properly handled or stored then they can become very hazardous. The purpose of this section is to provide guidance associated with routine tasks for storing pool chemicals.

- Store pool chemicals below 95°F/35°C and in conditions recommended by the manufacturer (for example, low humidity and out of direct sunlight).
- Protect stored pool chemicals from getting wet.
 - Do not store containers of any pool chemical directly on the floor.
 - Store pool chemicals away from doors and windows.
 - Cover opened containers with waterproof material.
 - Check the chemical storage area regularly for any evidence of water entry and report any identified problems immediately.
 - Potential routes of water entry include roofs, ceilings, windows (particularly if they are open or broken), doors, walls, wall/floor joints, water pipes/hoses, sprinkler systems, and drains (particularly if they are faulty or clogged).

Chapter 6

Pump Room Safety

Please see State Bathing Codes for specific regulations for the appropriate state.

- Always enter the pump room wearing shoes with rubber soles.
- Always wear personal protective equipment; safety glasses, gloves, apron, and dust mask.
- There should be adequate drainage.
- Never mix chemicals
- Never add water to chemicals. Add chemicals to water slowly.
- Never lean over the hair and lint strainer.
- Always watch your step. Don not trip on piping.
- Always report any leaks to your supervisor.
- Always smell for any gases when entering. If so, leave the pump room and contact your supervisor immediately.
- The door should remain locked at all times when someone is not inside.

Chapter 7

Bloodborne Pathogen Exposure Control Plan

See Bloodborne Pathogen Control Plan-Separate Manual

OSHA Standard 29 CFR Part 1910.1030: Occupational Exposure to Bloodborne Pathogens

In accordance of the Occupational Safety and Health Administration Standard 29 CFR 1910.1030 entitled Occupational Exposure to Bloodborne Pathogens, this exposure Control Plan is written and should be implemented by the Company as outlined in this document.

Acquired Immune Deficiency Syndrome (AIDS), hepatitis B, and hepatitis C demand serious concern among workers who have the possibility of being exposed to blood or certain other body fluids that contain bloodborne pathogens. Bloodborne pathogens are organisms such as viruses and bacteria carried in human blood. These organisms can cause illness by directly entering the blood stream of an individual. Potentially infectious human body fluids include blood, semen, vaginal secretions, urine, feces, vomit, saliva, and any body fluids containing or suspected of containing blood.

The Company is committed to providing a safe and healthful work environment for our entire staff. In pursuit of this goal, the following exposure control plan (ECP) is provided to eliminate or minimize occupational exposure to bloodborne pathogens in accordance with OSHA stand 29 CFR 1910.1030, "Occupational Exposure to Bloodborne Pathogens".

The ECP is key to assisting our organization in implementing and ensuring compliance with the standard, thereby protecting our employees. Our ECP includes:

1. Determination of employee exposure
2. Implementation of various methods of exposure control, including
 - Universal precautions
 - Engineering and work practice controls
 - Personal Protective Equipment
3. Hepatitis B vaccination
4. Post-exposure evaluation and follow-up
5. Communication of hazards to employees
6. Record keeping
7. Procedures for evaluating circumstances surrounding exposure incidents

Chapter 8

Machinery, Tools, & Personal Protection

General Safety

Only trained employees may utilize machinery, tools, or equipment. The equipment should meet the Company safety requirements outlined in the safety manual. All personal protective clothing and equipment should be of safe design and construction for the work to be performed. Only those items of protective clothing and equipment that meet National Institute of Occupational Safety and Health (NIOSH) or American National Standards Institute (ANSI) standards should be procured or accepted for use. Selecting the appropriate machinery, tools, or equipment for a particular job is extremely important. Also, the manufacture's directions and safety tips should be applied when using any type of equipment.

Personal Protective Equipment

Osha Standard 29 CFR 1910-132

See Personal Protective Equipment Policy

Hand and Power Tools-OSHA Standard 1926.301

Employees should use the proper tools suitable to the job being done; only safe tools in good repair may be kept or used on the premises of the job. Using the proper tool is essential. The following guidelines apply to all tools, equipment and their operation.

Hand Tools-

- When using saw blades, knives, or other tools, you should direct the tools away from aisle areas and other employees working in close proximity.
- Knives and scissors should be sharp.
- Cracked saw blades should be discarded.
- Impact tools such as drift pins, wedges, and chisels should be kept free of mushroomed heads.
- The wooden handles of tools should not be splintered and should be securely fastened.
- Wrenches should not be used when jaws are sprung to the point that slippage occurs.
- Iron or steel hand tools may produce sparks that can be an ignition source around flammable substances. Spark-resistant tools made of non-ferrous materials should be used where this hazard exists.

Power Tools-

- All power tools should be insulated and properly grounded with three conductor type cords and ground plug.
- Extension cords that are frayed, worn or with missing ground prongs should not be used.
- Extension cords should have sufficient capacity for the portable power electric tool to be used.
- Never carry a tool by the cord or hose.
- Never yank the cord or the hose to disconnect it from the receptacle.
- All power cords should be three-conductor type with proper ground plug (UL approved) enclosed in common rubber waterproof sheaths.
- Disconnect tools when not using them, before servicing and cleaning them, and when changing accessories such as blades, bits, and cutters.
- Keep all people not involved with the work at a safe distance from the work area.
- Secure work with clamps or a vise, freeing both hands to operate the tool.
- Avoid accidental starting. Do not hold fingers on the switch button while carrying a plugged-in tool.
- Maintain tools with care; keep them sharp and clean for best performance.
- Follow instructions in the user's manual for lubrication and changing accessories.
- Be sure to keep good footing and maintain good balance when operating power tools.
- Wear proper apparel for the task. Loose clothing, ties, or jewelry can become caught in moving parts.
- Remove all damaged portable electric tools from use and tag them, "Do not use."
- Exposed moving parts of power tools need to be safeguarded. Belts, gears, pulleys, sprockets, spindles, drums, flywheels, chains, or other reciprocating, rotating, or moving parts of equipment should be guarded.
- The safety guards should never be removed when a tool is being used. Portable circular saws having a blade greater than 2 inches in diameter should be equipped at all times with guards.

- An upper guard should cover the entire blade of the saw.
- A retractable lower guard should cover the teeth of the saw, except where it makes contact with the work material. The lower guard should automatically return to the covering position when the tool is withdrawn from the work material.
- Drills, tappers, fastener drivers; horizontal, verticle, and angle grinders with wheels more than 2 inches in diameter; disc sanders with discs greater than 2 inches; belt sanders; reciprocating saws; saber saws, scroll saws, and jigsaws with blade shanks greater than ¼ inch wide; and other similar tools should be equipped with a constant-pressure switch or control that shuts off the power when the press is released. They should also be equipped with a “lock-on” control, if it allows the worker to also shut off the control in a single motion using the same finger or fingers.
- Disc sanders with discs 2 inches or less in diameter; grinders with wheels 2 inches or less in diameter; platen sanders, routers, planers, laminate trimmers, nibblers, shears, and scroll saws; and jigsaws, saber and scroll saws with blade shanks a nominal ¼ inch or less in diameter should be equipped with either positive “on-off” control switch, a constant pressure switch, or a “lock-on” control. It is recommended that the constant-pressure control switch be regarded as the preferred device.
- Other hand-held power tools such as circular saws having a blade diameter greater than 2 inches, chain saws, and percussion tools with no means of holding accessories securely should be equipped with a constant-pressure switch.

Electric Tools-OSHA Standard 1926.302 (a)

- Should have a three-wire cord with a ground and be plugged into a grounded receptacle, be double insulated, or be powered by a low voltage isolation transformer.
- If an adapter is used to accommodate a two-hole receptacle, the adapter wire should be attached to a known ground. The third prong should never be removed from the plug.
- Gloves and appropriate footwear should be used.
- Electric tools should be stored in a dry place when not in use.
- They may not be used in a damp or wet location, unless they are approved for that purpose.
- Ensure that cords from electric tools do not present a tripping hazard.

Portable Abrasive Wheel Tools-OSHA Standard 1926.303

- Abrasive wheel tools should be equipped with guards that: cover the spindle end, nut, and flange projections; maintain proper alignment with the wheel; and do not exceed the strength of the fastening.
- Allow the tool to come up to operating speed prior to grinding or cutting.
- No one should ever stand in the plane of the rotation of the wheel as it accelerates to full operating speed.
- Portable grinding tools need to be equipped with safety guards.
- While using a powered grinder always use eye or face protection, turn off the power when not in use, and never clamp a hand-held grinder in a vise.

Pneumatic Tools-OSHA Standard 1926.302(b)

- The tools should be securely fastened to the air hose.
- A short wire or positive locking device attaching the air hose to the tool should also be used.
- If an air hose is more than ½ inch in diameter, a safety excess flow valve should be installed at the source of the air supply to reduce pressure in case of hose failure.

Pneumatic Tools-OSHA Standard 1926.302(b)

- A safety clip or retainer should be installed to prevent attachments such as chisels, on a chipping hammer from being ejected during tool operation.
- Pneumatic tools that shoot nails, rivets, staples, or similar fasteners and operate at pressures more than 100 pounds per square inch, should be equipped with a special device to keep fasteners from being ejected, unless the muzzle is pressed against the work surface.
- Airless spray guns that atomize paints and fluids at pressures of 1,000 pounds or more per square inch should be equipped with automatic or visible manual safety devices that should prevent pulling the trigger until the safety device is manually released.
- Eye protection is required.
- Screens should also be set up to protect nearby workers from being struck by flying fragments around chippers, riveting guns, staplers, or air drills.
- Never point compressed air guns at anyone.

- A chip guard should be used when compressed air is used for cleaning.
- When using a jackhammer should wear safety glasses and safety shoes.
- Hearing protection is required when using pneumatic tools, such as jackhammers.

Compressed Air Use-OSHA Standard 1926.306

- When momentarily not in use the gun should be laid in such a position that the tool cannot fly out if the pressure is unexpectedly released.
- When not in use all tools should be removed from the gun.
- When disconnecting a compressed air tool from the airline, care should be taken to first shut off the pressure and then to operate the tool to exhaust the pressure remaining in the hose.
- Tools using quick release coupling may be detached without shutting off the pressure.
- Compressed air hose or guns should not be pointed at or brought into contact with the body of any person.

Liquid Fuel Tools-

- Gas and fuel should be handled, transported, or stored in approved flammable liquid containers.
- Before refilling a fuel-powered tool tank, the user should shut down the engine and allow it to cool to prevent accidental ignition of hazardous vapors.
- Effective ventilation and/or proper respirators should be utilized when using a fuel-powered tool inside a closed area.
- Fire extinguishers should be available in the area.

Hydraulic Power Tools-OSHA Standard 1926.305

- The fluid used in hydraulic power tools should be an approved fire-resistant fluid and should retain its operating characteristics at the most extreme temperatures to which it should be exposed.
- The hydraulic fluid used for the insulated sections of derrick trucks, aerial lifts, and hydraulic tools that are used on or around energized lines are the exception. The fluid is of the insulating type.
- All jacks-including lever and ratchet jacks, screw jacks, and hydraulic jacks should have a stop indicator, and the stop limit should not be exceeded.
- The manufacturer's load limit should be permanently marked in a prominent place on the jack, and the load limit should not be exceeded.
- A jack should never be used to support a lifted load.
- Fluids used in derrick trucks, aerial lifts, and hydraulic tools that are used around energized lines should be of the insulating type.
- The manufacturer's recommended safe operating pressure for hoses, valves, pipes, filters, and other fittings should not be exceeded.
- All jacks should have a stop indicator, and the stop limit should not be exceeded.

Insulation and Electrical Work-

- Handles of tools such as pliers, screwdrivers and similar tools may be covered with insulation for improvement of grip or to avoid unexpected short circuits.
- Portable ground fault circuit interrupters should be used when a permanent gfci is not present.
- Screwdrivers having metal shanks extending through the handles should not be used for electrical work.
- Metallic tapes or metallic rules should not be used near electrical equipment.

Tool Storage-

- Tools with sharp edges should be covered or stored in such a way as to guard against cutting hazards.
- Tools temporarily stored or laid aside on the job should be placed so as not to create a stumbling, falling or similar hazard.
- Tools may not be left on ladders or in traffic areas.
- Tools should be stored to keep them in good condition.

Ladders-OSHA Standard 1926.1053

Always inspect ladders carefully before each use. Never use a ladder that seems to be unsafe.

Step Ladders

- All stepladders should be opened fully so that the spreaders lock themselves in the open position.

- Tools and materials should be removed from the top and pail shelf before the worker descends. Nothing should ever be left on a ladder.
- The ladder should be placed on a firm, level base from which to work.
- The ladder should be placed so that the work can be done without leaning or stretching past the side rails.

Straight, Extension & Fixed Ladders

- When inspecting the base of a straight ladder the base should be at a distance from the vertical wall equal to one fourth the working length of the ladder.
- When using a straight ladder, the highest level one may work from is the third rung from the top.
- Straight ladders should always be placed so that the tops of the two rails are against a solid support. They should be lashed, preferably at top and bottom, to prevent movement. If it is not possible to lash the ladder in position, a helper should hold the ladder firmly.
- Extension ladders should be raised and lowered with care. The length of an extension ladder determines the number of personnel required for raising and lowering. Generally, it is permissible for one employee to raise or lower extension ladders up to 28 feet in length. Two employees are generally required for ladders 29 feet and up to 40 feet.
- When inspecting a straight ladder make sure the rails and rungs are not cracked, split or broken. Check the extension locks and pulley.
- When raising a ladder with two people, lay the ladder on the ground with one person standing at the foot. The second person should raise the opposite end and “walk it up” to the vertical position. Then, braced securely by both people, the ladder may be extended and placed in position for use. To lower the ladder, reverse the procedure, raising the top first to clear the hooks.
- Keep hands and fingers in the clear at all times to avoid crushing.
- Always face the ladder while ascending or descending it.
- Never carry materials or tools while climbing or descending a ladder except in an appropriate tool pouch.
- Always be certain that shoes are free of mud and grease to prevent falls.

Chapter 9

Construction Guidelines

Osha Standard 29 CFR-Safety and Health Regulations for Construction

Training and Education

Besides the standard training, any employee working in construction should also be trained in the recognition of hazards-be able to look at an operation and identify unsafe acts and conditions. A list of typical hazards employees should be able to recognize may include:

- Fall Hazards-Falls from- floors, ladders (straight and step), tripping, trenches, stairs, chairs.
- Electrical Hazards- damaged cords, outlets, overloads, metal boxes, overhead high grounding, switches, ground fault circuit interrupters (GFCI).
- Housekeeping Issues- exits, walkways, floors, trash, storage of materials (hazardous and non-hazardous), protruding nails, etc.
- Fire Hazards- oily-dirty rags, combustibles, exits blocked.
- Trips/Slips-stairs, un-even flooring, electrical cords, icy walkways
- Health Hazards-loss of hearing, eye injury due to flying objects, etc.

Material Storage -OSHA Standard 1926.250

- All materials stored in tiers shall be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse.
- Aisles and passageways shall be kept clear to provide for the free and safe movement of material handling equipment or employees.
- Non-compatible materials shall be segregated in storage.
- Bagged materials shall be stacked by stepping back the layers and cross-keying the bags at least every 10 bags high.

- Materials shall not be stored on scaffolds or runways in excess of supplies needed for immediate operations.
- Storage areas shall be kept free from accumulation of materials that constitute hazards from tripping, fire, explosion, or pest harborage.

Fire Protection and Prevention

Only approved containers and portable tanks shall be used for storage and handling of flammable and combustible liquids. Approved safety cans or Department of Transportation approved containers shall be used for the handling and use of flammable liquids in quantities of 5 gallons or less, except that this shall not apply to those flammable liquid materials which are extremely hard to pour, which may be used and handled in original shipping containers. For quantities of one gallon or less, the original container may be used for storage, use and handling of flammable liquids.

Demolition

Proper Use of a Jackhammer

Before using the Jackhammer

- Read the operator's instruction manual before using the tool.
- Be sure electric models with a three-wire system are properly grounded, to reduce the risk of fire and electric shock. This is not necessary for double insulated models. Use a ground fault interrupter (GFI) for maximum safety protection.
- Be sure the extension cord for electric models is a size large enough for the distance from the receptacle to tool.
- On engine-driven, air models always fill the gas tank outdoors with the engine turned off and cool. Never handle fuel while smoking or in the presence of sparks or open flame. Allow the engine to cool briefly if you need to refuel during the operation.
- **Always wear proper protective equipment. Safety glasses or shield, safety helmet, hearing protection, safety shoes, breathing protection, sturdy long pants, and long-sleeved shirt are essential.**

Operating the Jackhammer

- Always disconnect the electric power or air supply before inserting or removing tools.
- Be sure all tools are properly locked into the unit before operating.
- Keep all bystanders, children, and pets out of the work area.
- Allow the tool to do the work by using a grip light enough to maintain control.
- Prevent back injuries by using your leg muscles to lift the machine into operating position.
- Take rest breaks as needed.
- If stopping work for a short period of time or for the day, unplug the electricity or stop the compressor. (Take note-According to the most recent statistics from the National Institute on Occupational Health and Safety (NIOSH), approximately 20 million workers are exposed to hazardous noise on the job and an additional nine million are at risk for hearing loss from other agents such as solvents and metals. According to OSHA's permissible noise exposures table, the higher the decibel level, the shorter the acceptable duration of exposure per day. For example, the operator of a jackhammer (100 dB) may spend no more than two hours per day exposed to that noise level.)
- Know the machine that you are operating. Read and review the operator's manual. Get familiar with the controls before working with the backhoe or loader.
- Know the area where you are operating. Locate ditches, stumps, debris, and undercut banks and avoid these hazards by keeping a safe distance.

Excavation and Trenching Safety-OSHA Standard 1926.650

Prior to Excavation or Trenching

- All underground utilities should be clearly marked to identify potentially hazardous situations prior to starting work requiring excavation.
- Remove, support, or safeguard all surface encumbrances located at the site that may create a hazard to employees.
- At each site there should be a “competent” person whenever employees are digging or in the excavation. A “competent” person means someone capable of identifying existing and predictable hazards in the surroundings, or working conditions that are unsanitary, hazardous, or dangerous to employees. The competent person has authorization to take prompt corrective measures to eliminate any unsafe condition.

Material and Equipment-

- Trench shoring and trench jacks shall be on the site before any excavation begins when the expected depth should exceed four feet or where unstable soil is expected. In addition, a radio equipped truck or portable radio shall be on site at all times when work is in progress.

Protection of Employees-

- No one shall enter excavations of four feet or more in depth without having shoring in place or the banks cut to a safe angle. (Refer to OSHA Standard 1926.652). No one shall enter excavations of less than four feet without shoring or proper angle of repose unless authorized by a competent person.
- Excavations less than four feet in depth may not require this degree of protection if examination of the ground by a competent person provides no indication of a potential cave in. Workers should wear hard hats at the site when work is in progress. Provide a stairway, ladder, or ramp or other safe means of egress in trench excavations that are four feet or more in depth. The travel distance to the ladder should be no more than 25 feet of lateral travel for employees. The ladder should extend three feet above the edge of the trench.

Inspections-

A competent person should make daily inspections of excavations, the adjacent areas, and protective systems for evidence of possible cave-ins, indications of protective systems failure, hazardous atmospheres, or other hazardous conditions. The competent person should conduct an inspection...

- Prior to the start of work and as needed throughout the shift.
- After every rainstorm or other hazard increasing occurrence.
- As dictated by the activity taking place in the trench.
- When tensions, cracks, sloughing, under cutting, water seepage, bulging at the bottom or other similar circumstances occur.
- When there is any change in the size, location, or placement of the soil pile.
- When there is any indication of change or movement in adjacent structures.
- Where the competent person finds evidence of a situation that could result in a possible cave-in, indications of failure of protective systems, hazardous atmosphere, or other hazardous conditions, remove exposed employees from the hazardous area until safety measures are in place.
- Underground utility installations (such as electrical, phone, gas, sewage, water, and fuel lines) in the area have been identified.
- While an excavation is open, underground utility lines are protected, supported, or removed if necessary.
- Tools, material, and equipment are kept at least two feet from the edge. If not, they are kept in place by retaining devices.

Underground Hazards-

- Workers are not permitted underneath a load handled by lifting or digging equipment.
- No workers are permitted above others on sloped/benched faces unless those below are protected from falling material.
- No excavation is done below the level of the base or footing of any foundation or retaining wall unless the structure is supported.

Trenching

- Never enter an unprotected trench.
- Always use a protective system for trenches five feet deep or greater.

Protective Systems-

- Sloping to protect workers by cutting back the trench wall at an angle inclined away from the excavation not steeper than a height/depth ratio of one and one-half, according to the sloping requirements for the type of soil. (see chart below)
- Shoring to protect workers by installing supports to prevent soil movement for trenches that do not exceed 20 feet in depth.
- Shielding to protect workers by using trench boxes or other types of supports to prevent soil cave-ins.
- Always provide a way to exit a trench-such as a ladder, stairway, or ramp-no more than 25 feet of lateral travel for employees in a trench 4 feet or more deep.
- Keep spoils at least two feet back from the edge of trench.
- Make sure trenches are inspected by a competent person prior to entry and after any hazard-increasing event such as a rainstorm, vibrations, or excessive surcharge loads.

Protective Systems-

Soil Type	Height/Depth Ratio	Slope Angle(degrees)
Stable rock (granite or sandstone)	Vertical	90
Type A (clay)	¾:1	53
Type B (gravel, silt)	1:1	45
Type C (sand)	1 ½:1	34
Type A (short-term) (for a maximum excavation depth of 12ft.)	½:1	63

Source: OSHA Technical Manual, Section V, Chap. 2, Excavations: Hazard Recognition in Trenching and Shoring (Jan. 1999)

Silica Exposure

See Respirable Crystalline Silica Program-Separate Manual

The Respirable Crystalline Silica Program was developed to prevent employee exposure to hazardous levels of Respirable Crystalline Silica that could result through construction activities or nearby construction activities occurring on worksites. Respirable Crystalline Silica exposure at hazardous levels can lead to lung cancer, silicosis, chronic obstructive pulmonary disease, and kidney disease. It is intended to meet the requirements of the Respirable Crystalline Silica Construction Standard (29 CFR 1926.1153) established by the Occupational Safety and Health Administration (OSHA).

All work involving chipping, cutting, drilling, grinding, or similar activities on materials containing Crystalline Silica can lead to the release of respirable-sized particles of Crystalline Silica (i.e. Respirable Crystalline Silica). Crystalline Silica is a basic component of soil, sand, granite and many other minerals. Quartz is the most common form of Crystalline Silica. Many materials found on construction sites include Crystalline Silica; including but not limited to – cement, concrete, asphalt, pre-formed structures (inlets, pipe, etc.) and others.

Consequently, this program has been developed to address and control these potential exposures to prevent our employees from experiencing the effects of occupational illnesses related to Respirable Crystalline Silica exposure.

Power Industrial Truck Program

See Power Industrial Truck Training Program-Separate Manual

The Power Industrial Truck Training Program was developed to ensure a safe work environment and to protect the health and safety of staff who operate or maintain powered industrial trucks (PIT). The Occupational Safety and Health Administration (OSHA) per 29 CFR 1910.178 states in part, only trained and authorized operators shall be permitted to operate a PIT.

Chapter 10

Fall Protection-OSHA Standard 1926.501

If anyone is exposed to a fall hazard of 6 feet or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems. When employees would be exposed to a fall hazard would most likely be at the edge of a swimming pool not yet filled with water. Under these conditions fall arrest protection would be used. A personal fall arrest system consists of a full-body harness, lanyard, and anchor point or a full-body harness, lanyard, lifeline, anchor point, and deceleration/grabbing device.

OSHA Standard 1926.502

All fall protection equipment shall meet or exceed appropriate American National Standards Institute (ANSI) standards.

- Body Harness-Only full-body harnesses shall be used. The use of a body belt is prohibited.
- Connecting Device-Shock-absorbing lanyards and lifelines
 1. Lanyards and lifelines shall have a minimum breaking strength of 5,000 pounds.
 2. Lanyards shall not exceed six feet in length.
 3. Safety lanyards shall be a minimum of ½ inches thick nylon or equivalent, with a maximum length to provide for a fall of no greater than six (6) feet.
 4. Personal fall arrest systems shall limit the maximum arresting forces to 1800 pounds with a full body harness.
 5. Lifelines shall be protected against cutting and abrasions.
 6. The attachment point of the body harness should be located in the center of the wearer's back near shoulder level, or above the wearer's head.
 7. Hardware should be drop forged, pressed or formed steel, or made of materials equivalent in strength.
 8. When vertical lifelines (droplines) are used, no more than one employee may be attached to any one lifeline.
 9. Full body harness systems should be inspected prior to each use for mildew, wear damage, and other deterioration and defective components removed from service if their function or strength has been adversely affected.

Chapter 11

Lifting Techniques

The Company is committed to helping reduce back injuries at work by emphasizing good lifting techniques. All employees are required to participate in our Safe Lifting training upon hire.

How to Lift Properly

- Assume a stable stance and check for firm footing before lifting. The feet should be kept apart with one foot positioned in front of the other, toes pointed out.
- Knees should be bent; don't bend at the waist.
- Don't lift more than you are capable of safely lifting. Use dollies, hand trucks or other material handling devices when appropriate to lift heavy, bulky or awkward items.
- Tighten stomach muscles. Abdominal muscles support your spine when you lift, offsetting the force of the load.
- Lift with your legs.

- Keep the load close. Do not hold the load away from your body. The closer it is to your spine, the less force it exerts on your back.
- Keep your back upright. Whether lifting or putting down the load, do not add the weight of your body to the load. Avoid twisting the torso while lifting.
- If back supports or lifting supports are worn when performing lifting tasks, wearers should be aware that the back support should only serve as a reminder to lift properly, using proper lifting techniques. It should not be used to lift beyond what the person is normally able to lift safely without it.

How to Avoid Lifting Injuries

- Know your strength-Get the assistance of a second person whenever needed.
- Plan ahead-Find a place to put what you are carrying.
- Be sure your footing is secure.
- Use arm and leg muscles-Keep your back straight and the load close to your body.
- Grasp object firmly-Hold it so that your fingers won't be pinched if the load should shift.
- Be sure you can see-Have plenty of light and be able to look over the load.
- Set object down using arm and leg muscles-Rest one corner first so hands don't get caught underneath.

Chapter 12

Office Safety

Many mishaps in offices stem from the fact that these areas are frequently considered non-hazardous areas and therefore safety is often not emphasized.

General Safety Tips

- Come to work rested-Fatigue is a frequent factor in mishaps.
- Think about safety and follow safety rules.
- No practical jokes.
- Know your emergency procedures-Fire, first aid, & emergency numbers.

Preventing Mishaps Caused by Falling

- Keep the floor clean.
- Use aisles-Avoid taking short cuts between desk when wastebaskets, phone and extension cords or other objects are located there.
- Keep file and desk drawers closed when unattended.
- Watch your step-Do not read while walking, nor obstruct your vision with tall loads. Report burned out lights promptly.
- Wipe up wet spots.
- Foot protection-Wear shoes that protect from cuts, crushing, liquids or slipping. In offices, lower heels are less fatiguing.
- Keep chairs solidly on the floor-Do not tilt back in chairs.

Preventing Filing and Storage Accidents

- Avoid overloading top drawers-Too much weight near the front of a drawer can cause overbalancing.
- Close one drawer before opening another.
- Do not struggle with stuck drawers or doors-That's an easy way to cause back injury or bring everything down on you-if stuck, get assistance and have it repaired.
- Don't stand on chairs, boxes, or other unstable objects.

Preventing Machine Accidents

- Read instructions before using a machine you do not know how to operate.
- Be alert for electrical hazards.
- Check machine position before use-Typewriters, fax machines, and photocopiers should be firmly on the working surface.
- Keep liquids away from electrical machines, keyboards, or cords.

Preventing Supply Room Accidents

- Good housekeeping.
- Carefully label chemicals and flammables and keep them in approved containers.

- Dispose of shipping and packing materials-Loose debris can cause falls and is a fire hazard.
- Heavy objects should be stored on lower shelves and materials stacked neatly.
- Use ladders-Do not use chairs or shelves for support.

Preventing Cuts and Punctures

- Cut away from your hand or body when using utility knives and other cutting instruments.
- Store sharp or pointed objects separately in a drawer.
- Sweep up broken glass. Glass splinters can be picked up with a damp towel.
- A guard should be provided for paper cutters.

Preventing Electrical Hazards

- Equipment should be properly grounded to prevent shock injuries.
- A sufficient number of outlets should prevent circuit overloading.
- Do not use poorly maintained or non-approved equipment.
- Cords should not be dragged over nails, hooks, or other sharp objects.
- Three prong plugs provide protection from shock.
- Receptacles should be installed and electric equipment maintained so that no live parts are exposed.
- Heaters should be equipped with approved automatic cut-off devices to prevent fire if the unit is accidentally turned over.
- Machines should be disconnected before cleaning or adjusting.

Fire Prevention

- All employees should know where fire extinguishers are located and how to use them.

Video Display Terminals-A video display terminal (VDT) is a component of a computer system. A VDT is a television-like screen. An operator types information on a keyboard and the computer displays the information on the VDT.

VDT Health and Comfort Issues-The Federal Food and Drug Administration (FDA) regulates the manufacture of video display terminals. A radiological control group within the FDA conducts studies and surveys to ensure that terminals sold to the public meet all safety standards for radiation levels. VDT operators may report muscular-skeletal discomfort in the neck, shoulders, back, arm, and hands. They also may report visual discomfort.

Corrective Actions

- Maintain good posture-To prevent neck and back strain, keep your spine and head upright, and sit well back into your chair.
- Correct hand and wrist placement-Shoulder muscles can become tense when arms and hands are held too high. Hold arms comfortably at your side, with your upper arm and forearm at about a right angle. Wrists should be in line with the forearm; wrist problems can develop if they are bent at extreme angles.
- Use of hand, wrist or arm supports-These have proven useful in reducing or relieving physical stresses in certain working environments.
- Good eye care-Focusing at close range for long periods of time can sometimes cause blurred vision or eye soreness. To lessen the strain on eye muscles, keep your VDT screen at least 18-28 inches from your eyes.
- Good lighting-More lighting is not better when it comes to VDT work. Less lighting is required when working with lit characters on a VDT screen. High levels of lighting contribute to screen glare and reflection-and-thus, to eyestrain and discomfort. Indirect lighting is the best light for VDT work.
- Properly designed chair.
- Periodic breaks-Scheduled breaks following long periods of uninterrupted terminal work are most helpful when they include stretching, moving of hands, fingers, arms and wrists in a variety of other positions and gentle rubbing of hand and arm muscles.
- Positioning of work-To help prevent slouching in your neck, angle your work material up toward vertical, so you do not have to lean over your desk.

Chapter 13

Personal Safety

There are several risks that are related with working outside in extreme temperatures. Employees who are exposed to heat are faced with potential health risks. It is the responsibility of the employer to educate employees on what the risks are and how to avoid them.

1. **Dehydration**-When the body does not have as much water and fluids as it should.

Preventive Measures-

- Drink plenty of water.
- Avoid drinks with caffeine.

2. **Heat-Related Illnesses-** A person with symptoms including headache , nausea, and fatigue after exposure to heat probably has some measure of a heat-related illness.

- **Heat exhaustion:** A warning that the body is getting too hot. The person may be thirsty, giddy, weak, uncoordinated, nauseous, and sweating profusely. The body temperature is usually normal and the pulse is normal or raised. The skin is cold and clammy. Although heat exhaustion often is caused by the body's loss of water and salt, salt supplements should only be taken with advice from a doctor.
- **Heat stroke:** A core body temperature that rises above 104°F (40°C) accompanied by hot, dry skin and central nervous system abnormalities such as delirium, convulsions, or coma. Irrespective of type, heat stroke can be LIFE-THREATENING! Immediate medical attention is essential when problems first begin. Symptoms may include confusion, combativeness, bizarre behavior, faintness, staggering, strong rapid pulse, dry flushed skin, lack of sweating, possible delirium or coma.

Preventative Measures-

- Dress appropriately-wear a hat, sunglasses, etc.
- Drink plenty of water throughout the day.
- Avoid drinks with caffeine.
- Eat well-balanced meals before each shift and during breaks.

3. **Damage to the skin and eyes-** Sunlight has a profound effect on the skin causing premature skin aging, skin cancer, and a host of skin changes.

Preventative Measures-

- Use waterproof skin and lip protection sunscreen.
- Wear hat with wide brim to protect the face, neck, and ears.
- Wear sunglasses with UVA protection.
- Wear light-colored, light-weight clothing.

4. **Skin Irritations**-Common around aquatic environments due to the moist environment.

- **Athlete's foot**- skin fungal infection. Typical symptoms include scaling and peeling in the toe webs.
- **Skin eczema**- skin disorder categorized by scaly and itching rashes.
- **Ring worm**- skin infection caused by a fungus. Characterized by ring-shaped, scaly, itching patches
- **Swimmer's ear**- inflammation, irritation, or infection of the outer ear.
- **Reactions to handling pool chemicals**-See Chapter 5.

Preventative Measures-

- Wear sandals.
- Keep the facility clean.
- Dry the skin thoroughly after exposure to moisture

INJURY/ACCIDENT INFORMATION

Which Part of the Body Was Injured: (e.g. Head, Neck, Arm)	Nature of Injury: (e.g. Laceration, Bruise, Fracture)
Date of Death (If applicable):	Is Employee Hospitalized? Yes <input type="checkbox"/> No <input type="checkbox"/>
Lost Time? Yes <input type="checkbox"/> No <input type="checkbox"/>	If Yes, What was First Full Day Out:
Date Last Day Worked:	Date Disability Began:
Date Returned to Work:	OR Estimated Return to Work Date:
Time Workday Began: am <input type="checkbox"/> pm <input type="checkbox"/>	

MEDICAL INFORMATION

Safeguards Provided? Yes <input type="checkbox"/> No <input type="checkbox"/>	Safeguards Utilized? Yes <input type="checkbox"/> No <input type="checkbox"/>
Initial Medical Treatment: Circle One <small>ER Treated and Released Hospitalized Physician/Clinic Minor/Onsite No Medical Treatment</small>	
Hospital/Clinic - Name, Address, Phone, Fax:	

WITNESS INFORMATION

Were There Any Witnesses? Yes <input type="checkbox"/> No <input type="checkbox"/> If Yes, List Names and How to Contact Them:

How do you think this type of Incident could be Prevented

Were there any Unsafe Conditions or Acts that Contributed to the Injury

Additional Comments

Signatures

Employee Name:	Employee Signature:
Supervisor Name:	Supervisor Signature:
Safety Director Name: Sabraya Isaacs	Safety Director Signature:

AUTHORIZATION FOR THE RELEASE OF PROTECTED HEALTH INFORMATION

I HEREBY AUTHORIZE THE USE OR DISCLOSURE OF HEALTH INFORMATION ABOUT ME AS DESCRIBED BELOW:

- 1) **Person(s) or group(s) of persons authorized to use or disclose the information:** Any physicians, medical practitioners, hospitals, clinics, HMO, long-term care facilities, medical or medically-related facilities, pharmacies, insurance companies, Plan Sponsor/Administrator and insurance support organizations such as the Medical Information Bureau.
- 2) **Person(s) or group(s) of persons authorized to collect or otherwise receive the information:** The particular Company in the Liberty Mutual Group to which I am submitting a claim and its authorized representatives, including organizations providing claims management services.
- 3) **Description of the information that may be used or disclosed:** This Authorization specifically includes the release of all information related to my physical and mental health and my insurance policies and claims, including, but not limited to, those containing diagnosis, treatments, prognosis, prescription drug information, alcohol or drug abuse or information regarding communicable or infectious conditions, such as HIV/AIDS.
- 4) **The information will be used or disclosed only for the following purpose(s):** For purposes of investigating, evaluating and processing my claim.

STATEMENTS OF UNDERSTANDING & ACKNOWLEDGMENT:

- I understand that health information about me provided to the Company in the Liberty Mutual Group to which I have submitted a claim will not be released by the Company to any person or organization except reinsuring companies, or other companies in the Liberty Mutual Group to which I submit a claim for benefits, other persons or organizations performing a business or legal service in connection with my claim, or as may be otherwise permitted or required by law. However, I also understand that, upon disclosure pursuant to this authorization to any person or organization that is not covered by federal privacy regulations, the disclosed information may no longer be protected by those regulations.
- I understand that I may revoke this authorization in writing at any time, except to the extent that action has been taken in reliance on this authorization, or to the extent that other law provides the Company with the right to contest a claim, by sending a written revocation to the Company in the Liberty Mutual Group to which I have submitted a claim. I also understand that the revocation of this authorization will not affect uses and disclosures of my health information for purposes of treatment, payment and health care operations.
- I understand that authorizing the disclosure of this health information is voluntary and the provision of health care services to me is not conditioned on whether I sign this authorization.
- This authorization will expire 24 months from the date signed.
- I am entitled to a copy of this authorization and acknowledge receipt of a copy thereof.

Name of Individual: _____
Signature: _____
Date: _____

A copy of this authorization will be considered as valid as the original

Health and Safety Manual

I have read and understand the Health and Safety Manual policies and procedures (www.guardforlife.com) and agree to abide by them. I understand that any violation of the above policies is reason for disciplinary action up to and including termination.

Employees Name (PRINT)	Employee Signature

Date

